Facility Name: **Yamaha Motor Manufacturing Corporation of America**
City: Newnan
County: Coweta
AIRS #: 04-13-077-00039 Application #: 704056/28632

Date SIP Application Received: November 18, 2022
Date Title V Application Received: November 18, 2022
Permit No: 3799-077-0039-V-06-1

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Introduction

This narrative is being provided to assist the reader in understanding the content of the referenced SIP permit to construct and draft operating permit amendment. Complex issues and unusual items are explained in simpler terms and/or greater detail than is sometimes possible in the actual permit. This permit is being issued pursuant to: (1) Sections 391-3-1-.03(1) and 391-3-1-.03(10) of the Georgia Rules for Air Quality Control, (2) Part 70 of Chapter I of Title 40 of the Code of Federal Regulations, and (3) Title V of the Clean Air Act Amendments of 1990. The following narrative is designed to accompany the draft permit and is presented in the same general order as the permit. This narrative is intended only as an adjunct for the reviewer and has no legal standing. Any revisions made to the permit in response to comments received during the public comment period and EPA review process will be described in an addendum to this narrative.

I. Facility Description

A. Existing Permits

Table 1 below lists the current Title V permit, and all administrative amendments, minor and significant modifications to that permit, and 502(b)(10) attachments.

Table 1: Current Title V Permit and Amendments

Permit/Amendment Number	Date of Issuance	Description
3799-077-0039-V-06-0	July 12, 2018	Title V renewal

B. Regulatory Status

1. PSD/NSR/RACT

Yamaha Motor Manufacturing Corporation of America (hereinafter, "facility") is a minor source under PSD regulations because its potential-to-emit (PTE) for each of carbon monoxide (CO), particulate matter ($PM/PM_{10}/PM_{2.5}$), and sulfur dioxide (SO_2) is below 250 tons per year (tpy).

The facility is a major source under non-attainment area new source review (NAA NSR) because it has the potential to emit more than 100 tons of VOC annually in the Atlanta area. The facility has never underwent any NAA NSR.

The facility is located in Coweta County, which is listed in many GA reasonable available control technology (GACT) rules. The facility's miscellaneous metal parts and products surface coating operation is subject to GA Rule (ii) while all the other coating/painting operations are subject to GA Rule (tt).

2. Title V Major Source Status by Pollutant

Table 2: Title V Major Source Status

Pollutant	Is the Pollutant Emitted?	If emitted, what is the facility's Title V status for the Pollutant?		
		Major Source Status	Major Source Requesting SM Status	Non-Major Source Status
PM	✓			✓
PM_{10}	✓			✓
$PM_{2.5}$	✓			✓
SO_2	✓			✓
VOC	✓	✓		
NO_x	✓		✓	
CO	✓			✓
TRS	n/a			
H_2S	n/a			
Individual HAP	✓		✓	

Pollutant	Is the Pollutant Emitted?	If emitted, what is the facility's Title V status for the Pollutant?		
		Major Source Status	Major Source Requesting SM Status	Non-Major Source Status
Total HAPs	✓		✓	
Total GHG	✓			✓

II. Proposed Modification

A. Description of Modification

Yamaha Motor Manufacturing Corporation of America proposes to vent exhaust from permitted emission units DB01, DTM1, DTM2, DF01, and DO02 to permitted thermal oxidizer RTO1. The facility also proposed to add robotic-arm paint spray guns to Paint Booth DB01 and would therefore increase facility production. No changes to permitted emission limits are requested. In addition, incorporate off-permit change notification projects not previously incorporated into the Title V permit.

B. Emissions Change

Table 3: Emissions Change Due to Modification

Pollutant	Is the Pollutant Emitted?	Net Actual Emissions Increase (Decrease) (tpy)	Net Potential Emissions Increase (Decrease) (tpy)
PM	✓	0.24	0.24
PM_{10}	✓	0.24	0.24
$PM_{2.5}$	✓	0.24	0.24
SO_2	✓	0	0
VOC	✓	0	0
NO_x	✓	0	0
CO	✓	0	0
TRS			
H_2S			
Individual HAP	✓	0	0
Total HAPs	✓	0	0
Total GHG	✓	0	0

C. PSD/NSR Applicability

The facility has been capped volatile organic compounds (VOC) limits by Condition 3.2.1 and Condition 3.2.2 to avoid PSD/NSR in current Title V Permit No. 3799-077-0039-V-06-0. No new emission unit (ID numbers) will be added, and the emission limits in Conditions 3.2.1 and 3.2.2 will remain unchanged. Therefore, the proposed modification will not trigger the PSD/NSR review.

III. Regulated Equipment Requirements

A. Brief Process Description

Yamaha Motor Manufacturing Corporation of America (YMMC) manufactures recreational vehicles including golf cars (GC), recreational water vehicles (WV), all-terrain vehicles (ATV), and recreational off-road vehicles (ROV). YMMC also manufactures utility ATVs (UTV). Manufacturing operations include material handling and storage, metal fabrication (stamping, cutting, and welding), fiberglass molding, plastic injection molding, urethane foaming, plastic component buffing and drilling, parts cleaning, electrostatic deposition base coating and powder top coating for metal parts, surface preparation and spray painting for plastic parts, and final vehicle assembly and testing. Fuel combustion sources at the facility include small natural gas-fired boilers supplying steam or hot water for process heating in operations such as surface cleaning, drying, and curing; natural gas-fired coating and bonding curing ovens; and natural gas-fired air heaters.

YMMC owns and operates a contiguous facility, Georgia Advanced Metals (GAM), less than five miles from the main plant which supplies YMMC with wheels, water vehicle shipping containers, and other miscellaneous aluminum and steel parts. The main manufacturing operations include metal fabrications (e.g., welding).

B. Updated Equipment List for the Process

Emission Units		Applicable Requirements/Standards	Air Pollution Control Devices	
ID No.	**Description**		**ID No.**	**Description**
AGW1	Golf Cart/ATV and Water Vehicle Assembly Lines	391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 391-3-1-.02(2)(tt)	N/A	None
AM07	Water Vehicle Assembly Bonding Oven	391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 391-3-1-.02(2)(g)	N/A	None
BL01	8.4 mm BTU/Hr. Steam Boiler No. 1 Burn natural gas and/or propane only	391-3-1-.02(2)(d) 391-3-1-.02(2)(g)	N/A	None
BL02	8.4 mm BTU/Hr. Steam Boiler No. 2 Burn natural gas and/or propane only	391-3-1-.02(2)(d) 391-3-1-.02(2)(g)	N/A	None
BL03	8.4 mm BTU/Hr. Steam Boiler No. 3 Burn natural gas and/or propane only	391-3-1-.02(2)(d) 391-3-1-.02(2)(g)	N/A	None
BL04	8.2 mm BTU/Hr. Steam Boiler No. 4	391-3-1-.02(2)(d) 391-3-1-.02(2)(g)	N/A	None
DB01	D-Line Paint Booth No. 1	391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 391-3-1-.02(2)(tt)	WC05/ **RTO1**	Water Curtain / Regenerative Thermal Oxidizer
DB02	D-Line Paint Booth No. 2	391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 391-3-1-.02(2)(tt)	WC17/ RTO1	Water Curtain / Regenerative Thermal Oxidizer
DRB1	D-Line Rework Paint Booth	391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 391-3-1-.02(2)(tt)	N/A	Dry filters
DF01	D-Line Flash Tunnel	391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 391-3-1-.02(2)(tt)	**RTO1**	Regenerative Thermal Oxidizer
DF02	D-Line Flash-Off Tunnel No. 2	391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 391-3-1-.02(2)(tt)	RTO1	Regenerative Thermal Oxidizer
DTM1	D-Line Tack/Mask Booth No. 1	391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	**RTO1**	Regenerative Thermal Oxidizer

Emission Units		Applicable Requirements/Standards	Air Pollution Control Devices	
ID No.	Description		ID No.	Description
DTM2	D-Line Tack/Mask Booth No. 2	391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	**RTO1**	Regenerative Thermal Oxidizer
EB01	E-Line E-Coat Bath	391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 391-3-1-.02(2)(ii)	N/A	None
DO02	D-Line Cure Oven	391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 391-3-1-.02(2)(g)	**RTO1**	Regenerative Thermal Oxidizer
EO01	E-Line E-Coat Oven	391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 391-3-1-.02(2)(g)	N/A	None
FO01	F-Line Powder Coat Oven	391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 391-3-1-.02(2)(g)	N/A	None
PA02	A-Line E-Coat Bath	391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 391-3-1-.02(2)(ii)	N/A	None
PA03	A-Line E-Coat Oven	391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 391-3-1-.02(2)(g)	N/A	None
PA07	B-Line Powder Coat Oven	391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 391-3-1-.02(2)(g)	N/A	None
GTM1	G-Line Tack / Mask Booth No. 1	391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	N/A	None
GB01	G-Line Paint Spray Booth No. 1	391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 391-3-1-.02(2)(ii) 391-3-1-.02(2)(tt)	WC 18/ RTO2	Water Curtain / Regenerative Thermal Oxidizer
GB02	G-Line Paint Spray Booth No. 2	391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 391-3-1-.02(2)(ii) 391-3-1-.02(2)(tt)	WC 19/ RTO2	Water Curtain / Regenerative Thermal Oxidizer
GB03	G-Line Paint Spray Booth No. 3	391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 391-3-1-.02(2)(ii) 391-3-1-.02(2)(tt)	WC 20/ RTO2	Water Curtain / Regenerative Thermal Oxidizer
GF01	G-Line Flash-Off Tunnel No. 1	391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 391-3-1-.02(2)(tt)	RTO2	Regenerative Thermal Oxidizer
GF02	G-Line Flash-Off Tunnel No. 2	391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 391-3-1-.02(2)(tt)	RTO2	Regenerative Thermal Oxidizer
GF03	G-Line Flash-Off Tunnel No. 3	391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 391-3-1-.02(2)(tt)	RTO2	Regenerative Thermal Oxidizer
GO01	G-Line Cure Oven	391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 391-3-1-.02(2)(g)	RTO2	Regenerative Thermal Oxidizer
PS01	Paint Shop Miscellaneous VOC Usages	391-3-1-.02(2)(tt)	N/A	None
SM01	SMC Sheet Molding Compound Press	391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	N/A	None
SM02	SMC Sheet Molding Compound Press	391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	N/A	None
SC01	Cold Solvent Metal Parts Cleaner/Washer No. 1	391-3-1-.02(2)(ff)	N/A	None
SC02	Cold Solvent Metal Parts Cleaner/Washer No. 2	391-3-1-.02(2)(ff)	N/A	None
SC03	Cold Solvent Metal Parts Cleaner/Washer No. 3	391-3-1-.02(2)(ff)	N/A	None

Emission Units		Applicable Requirements/Standards	Air Pollution Control Devices	
ID No.	**Description**		**ID No.**	**Description**
SC04	Cold Solvent Metal Parts Cleaner/Washer No. 4	391-3-1-.02(2)(ff)	N/A	None
SP01	Plant 2 Surface Preparation	391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	N/A	None
WVR1	Water Vehicle Assembly Rework Booth	391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 391-3-1-.02(2)(tt)	N/A	Dry filters
TVR1	Terrain Vehicle Assembly Rework Booth	391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 391-3-1-.02(2)(tt)	N/A	Dry filters
ABR1	A/B Line Paint Rework Booth	391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 391-3-1-.02(2)(tt)	N/A	Dry filters
SM03	**SMC Sheet Molding Compound Press**	**391-3-1-.02(2)(b)** **391-3-1-.02(2)(e)**	**N/A**	**None**

* Generally applicable requirements contained in this permit may also apply to emission units listed above. The lists of applicable requirements/standards are intended as a compliance tool and may not be definitive.

** Modified or new emission units are in bold

C. Equipment & Rule Applicability

Emission and Operating Caps –

Unchanged.

Applicable Rules and Regulations -

Unchanged.

D. Permit Conditions

Condition 3.2.4 has been modified to include the exhaust from existing emission units DB01, DTM1, DTM2, DF01, and DO02 vent to existing thermal oxidizer RTO1.

V. Testing Requirements (with Associated Record Keeping and Reporting)

In the facility's email of April 4, 2023, the facility indicated that in the past, the low VOC concentration in the inlet gas stream to the RTOs made it difficult to obtain accurate RTOs outlet measurements. As a result, GA EPD approved an alternative method for testing the VOC destruction efficiency. This method involves injecting acetone into the inlet gas stream to provide a higher VOC concentration, thereby improving the accuracy of the destruction efficiency test.

Condition 4.2.1 has been modified to remove RTO1 from this condition.

In the facility's email of April 5, 2023, the facility indicated that the design flow rate to RTO1 will be increasing as a result of the modifications. With the fixed RTO combustion chamber volume, residence time will decrease and will therefore have an impact on the destruction efficiency. Therefore, Condition 4.2.2 has been added to require that the facility conducts the initial and subsequent VOC destruction efficiency (DRE) tests for the regenerative thermal oxidizer (ID No. RTO1) after the reconfiguration of exhaust venting is complete.

Condition 4.2.3 has been added to verify either the enclosures meet the Division's criteria for permanent total enclosures (PTE, which indicates 100% capture efficiency) by using test method 204 or conduct individual capture efficiency test.

VI. Monitoring Requirements (with Associated Record Keeping and Reporting)

Condition 5.2.2a has been modified for regenerative thermal oxidizer RTO1.

Condition 5.2.2b has been modified to clarify monitoring requirements for RTO2.

Note both paragraphs require monitoring the pressure drop from the combined vent to the RTOs.

VII. Other Record Keeping and Reporting Requirements

New Condition 6.2.14 requires the facility to notify the Division within 15 days after the re-configuration of the exhaust system to RTO1 is completed. The re-configuration is assumed to be completed after the installation of the new robotic-arm paint spray guns and the vents from DF01, DO02, DTM1, and DTM2 are routed to RTO1.

VIII. Specific Requirements

Insignificant Activities Based on Emission Levels

- This section will be modified to include equipment that are proposed to be "insignificant activities based on emission levels" per the requirements detailed in GEOS Title V forms Section C.1.2.

Addendum to Narrative

The 30-day public review started on month day, year and ended on month day, year. Comments were/were not received by the Division.

//If comments were received, state the commenter, the date the comments were received in the above paragraph. All explanations of any changes should be addressed below.//